COMMUNITY
WATER CENTER

January 16, 2007

Polly Lowry
Central Valley Regional Water Quality Control Board
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Sent Via Fax: (916) 464-4645 and United States Mail

CC: Pamela Creedon, Executive Officer
Karl Longley, Vice Chair
Paul Betancourt, Board Member
Christopher Cabaldon, Board Member
Kate Hart, Board Member
Sopac Mulholland, Board Member
Dan Odenweller, Board Member

RE: Comments on Tentative Waste Discharge Requirements General Order for Existing Milk Cow Dairies

Dear Ms. Lowry:

The Community Water Center submits these comments to the Central Valley Regional Water Quality Control Board ("Regional Board") on behalf of itself, the Sierra Club, Baykeeper, and the Asociacion de Gente Unida por el Agua ("AGUA"), a coalition of communities and non-profit organizations whose mission is to secure safe, clean and affordable water for all. This Tentative Waste Discharge Requirements General Order for Existing Milk Cow Dairies ("Draft WDR") is ineffective in protecting the groundwater quality that 90% of the Central Valley relies on as a drinking water source.

We fully support those comments submitted by the Center on Race, Poverty & the Environment ("CRPE") and Lawyers for Clean Water for this Draft WRD and, in the interest of efficiency, will not repeat those important points here.

I. The Draft WDR does not impose an effective regulatory program to ensure groundwater is protected for the beneficial uses of the region, particularly as a source of drinking water.

In order to address the severe and extensive problem of groundwater contamination, particularly in the San Joaquin Valley, the Regional Board should at the very least require one (if not both) of the following approaches in the Draft WDR:

1) Enforceable groundwater quality standards based on monitoring wells on each facility.
2) Best Practicable Control Technology (BPCT) for every facility, particularly in the absence of enforceable water quality standards and monitoring.

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Unfortunately, neither of these approaches to protecting water quality is fully implemented in this Draft WDR. Therefore, it is unclear how this permit will achieve its purpose, to protect water quality for the beneficial uses of the region.

II. This Draft WDR will disproportionately impact low income communities and communities of color because it does not protect groundwater from further degradation from existing dairies.

This Draft WDR will allow further groundwater degradation from existing dairies, particularly nitrate contamination, which is the number one cause of drinking water well closure and contamination in the State.

Already Latino and low-income communities are more likely to have contaminated drinking water in the Central Valley Region, and this is most often due to high levels of nitrate in the groundwater.[1] Additionally, Latino and low-income communities are less likely to have health care and access to treatment or substitute water sources, and are more likely to be exposed to cumulative impacts through other media (such as air).

Given the current impacts communities are already facing from groundwater contamination, the Draft WDR should be more protective of groundwater quality than other regions, not less. Unfortunately, this Draft WDR is less stringent than other Regional Water Quality Control Boards, especially the Santa Ana Region.[2] The communities of the Central Valley deserve to be at least as protected as other regions of the state, and arguably more so given that the Central Valley has many of the lowest income communities in the State, which are unable to mitigate the impacts of groundwater pollution.[3]

III. This Draft WDR should require the highest standards in order to address the groundwater crisis already caused, in part, by these existing facilities.

The Central Valley Region has approximately 75% of the State's drinking water violations due to nitrate contamination of groundwater sources.[4] There is no question that Dairy facilities are responsible for some significant share of this groundwater contamination. Already studies show that at least one nitrate polluted well was found at 63% of dairies sampled in Tulare County, all due to existing dairy operations, which may have been in compliance with Title 27 regulations.[5] Therefore, the Regional Board must

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[1] Environmental Justice Coalition for Water, *Thirsty for Justice: A People's Blueprint for California Water* (2005).

[2] Santa Ana Order No. 99-11 prohibits application of manure to cropland because adequate salt and nitrate offset programs were not implemented.

[3] See Sierra Club, *Latino Communities at Risk*, p. 4 (2004), available at http://www.sierraclub.org/comunidades, citing Ash, Michael and Fetter, T. Robert, "Who Lives on the Wrong Side of the Tracks? Evidence from the EPA's Risk Screening Environmental Indicators Model," Social Science Quarterly, 2004; "Toxic Waste and Race in the United States," UCC-CRJ, 1987; EPA Factsheet, available at www.epa.gov/compliance/resources/faqs/ej/index.html#faq20.

[4] DHS Annual Compliance Report for Public Drinking Water Systems 2004, available at http://www.dhs.ca.gov/ps/ddwem/publications/AnnualComplianceReport2004.pdf

[5] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, Information Sheet, pg 6 (11/22/06).

ensure that this draft WDR imposes the highest standards in order to address this significant source of groundwater contamination plaguing our valley's drinking water.

A. <u>This Draft WDR should require the Best Practicable Control Technologies (BPCT)</u>

This WDR should require the BPCT to ensure that the groundwater that 90% of us rely on for our drinking water is adequately protected.[6] Specifically, this Draft WDR does not require the BPCT for retention ponds. We will not repeat the comments of Ingrid Brostrom at CRPE in her letter on this subject since she lays out clearly how this Draft WDR fails to meet this standard regarding retention pond requirements. In addition to her comments, it is not clear why waste water holding ponds that are below-grade should only be required to maintain a one (1) foot freeboard following a storm event, rather than the standard two (2) feet.[7]

In addition to lagoons, this Draft WDR fails to impose best management practices and BPCT for solid manure. In fact, this Draft WDR does virtually nothing to regulate the discharge of solid manure to third parties. The Draft WDR only requires that a written agreement with the third party (which must specify plans for the use and management of the third party's land application area) be included in the Discharger's Nutrient Management Plan.[8] Therefore, there is no nutrient management plan requirement for third parties receiving solid manure, nor is there any groundwater protection aspect of a nutrient management plan in the only other regulatory program that might apply to third parties, namely the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands[9]

The Regional Board is once again avoiding addressing the problem of solid waste manure (as it has other soil amendment) application to land and its impacts on groundwater quality. The Regional Board failed to address this issue in its Conditional Waiver Program and is now failing to address it here. It is time to do something about this major source of groundwater contamination.[10]

In comparison, the Santa Ana Region placed a ban on solid waste manure application in the region.[11] As a result, the Central Valley is receiving much of the solid waste manure and sludge from Southern California, resulting in nutrient overloading and ultimately degrading our groundwater. This Draft WDR not only does nothing to address

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[6] BPCT is required by the State Water Resources Control Board Resolution 68-16 for to ensure that high quality groundwater is protected.

[7] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, Standard Provisions and Reporting Requirements B.19. (11/22/06).

[8] Waste Discharge Requirements General Order for Existing Milk Cow Dairies C.3. (11/22/06); Attachment C: Technical Standards for Nutrient Management for Existing Milk Cow Dairies I.C.1 – 6. (11/22/06).

[9] Order No. R5-2006-0053; Order No. R5-2006-0054.

[10] For an analysis done by the Santa Ana Regional Water Quality Control Board on this very issue, see Santa Ana Order No. 99-11. That regional board found that the vast majority of salt and nitrate contamination of groundwater from dairies occurred through application of solid manure.

[11] Santa Ana Regional Water Quality Control Board Order No. 99-11.

this impact from existing facilities, but leaves our valley open to further dumping of wastes from other regions.

We recommend that third parties receiving solid manure from dairy facilities be required to submit a nutrient management plan showing the nitrogen and salt balance for all land to which solid manure is applied.

B. <u>This Draft WDR should set the Performance Goal at the highest possible, and not allow for continuation of the status quo.</u>

The Performance Goal in this Draft WDR should be set to protect and ultimately improve water quality in the region since the permit itself recognizes that the Regional Board's lack of regulation thus far has already caused groundwater degradation.[12] Unfortunately, this Draft WDR only aims to have individual facilities not push current levels past maximum contaminant levels, and does not look at the cumulative impact of all facilities, or at reducing levels to background levels.

The performance goals evaluated in the Brown Vence, and Associate's Task 4 Report[13] included 1) no release to underlying geologic materials, 2) no change in groundwater quality, and 3) no exceedances of water quality objectives. Unfortunately, the Regional Board chose to aim low, and only require the lowest performance goal.[14] Instead, the Regional Board should set the Performance Goal at no change in groundwater quality, at the very least, and should require that facilities reduce water quality to background levels to mitigate past contamination from dairy activities. Such a performance standard is required by the State Water Board Resolution 68-16, which requires that a WDR set requirements that will assure "the highest water quality consistent with the maximum benefit to the people of the state."

While it may be the case that some impact on groundwater will result from even the most efficient systems, particularly from land application of wastewater and solid manure, dischargers should be required to clean up or mitigate these impacts if they contribute to groundwater degradation.[15] For example, if a discharger is found to contribute to nitrate contamination in groundwater designated as supporting municipal or domestic water supply, that discharger should have to pay a mitigation fee for that impact if it is not able to reduce its impact. Through such a mitigation program, this impact is internalized by the discharger and a source of funds is generated for reducing the nitrate load of drinking water sources in the region. Without setting high standards for dischargers, the Regional Board is continuing to allow facilities to pollute community drinking water sources without mechanisms for mitigation.

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[12] "The waste management systems at these existing dairies are commonly not capable of preventing adverse impacts on water of the state either because of the outdated design or need for maintenance or both. Historic operation of these dairies has presumptively resulted in an adverse effect on the quality of waters of the state. … continued operation of dairies without waste management improvements will perpetuate the ongoing adverse water quality effects caused by the generation and disposal of dairy waste." Waste Discharge Requirements General Order for Existing Milk Cow Dairies, page 5, paragraph 24 (11/22/06).

[13] Brown, Vence & Associates, Task 4 Report: Evaluation of Alternative Confined Animal Facilities Criteria to Protect Groundwater Quality From Releases (2004).

[14] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, page 7, paragraph 32 (11/22/06).

[15] See State Water Board Resolution 92-49.

C. There should be a presumption for the highest standard for every facility.

The Regional Board should require all facilities to meet the highest standards, rather than having to make special exceptions to require high standards at the discretion of the Executive Officer. This is particularly true for groundwater monitoring. Without groundwater monitoring wells that are sufficient to characterize groundwater quality up gradient and down gradient from contaminating areas on each facility, it will be impossible to ensure that the facility is not degrading groundwater. Therefore, ALL facilities must be required to install monitoring wells, and not just those required at the discretion of the Executive Officer.[16]

For a more in depth discussion of our concerns regarding monitoring wells, please refer to Ingrid Brostom's letter on behalf of CRPE. We will not repeat those points here. We understand that the factors used for ranking groundwater monitoring priority in Table 2 are meant to prioritize those facilities that may be causing the highest risk of contamination of drinking water supplies. While this intent is laudable, the Draft WDR must include stricter timeframes for installations and ultimately ensure that all facilities are required to install groundwater monitoring wells and appropriate mitigation within 10 years to ensure compliance with water quality objectives, as required by the Basin Plans in the San Joaquin Valley.[17]

Groundwater monitoring at all facilities would also help the Regional Board meet the objectives set in the region's Basin Plans of establishing a groundwater monitoring network.[18] This first step of implementation for the Tulare Lake Basin Plan has yet to be implemented 17 years later. It is time to integrate this into all WDR programs, as it is ultimately the only way to truly determine if water quality objectives are achieved.

IV. The Draft WDR should allow for sufficient public participation and access throughout the process.

The Regional Board has an obligation to meet environmental justice principals throughout its regulatory programs. Environmental Justice is defined by California statute as "The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of all environmental laws, regulations, and policies." Therefore, this Draft WDR development process should include California Environmental Quality Act ("CEQA") analysis to allow for the public to understand the impact that this general permit program will have on public health and the environment, and should provide adequate public participation and access to information in all aspects of implementation and enforcement. Unfortunately this Draft WDR fails to do this in two important respects.

A. The Regional Board should conduct a CEQA process

[16] Monitoring and Reporting Program General Order for Existing Milk Cow Dairies, A.17.
[17] Sacramento and San Joaquin River Basin Plan and the Tulare Lake Basin Plan.
[18] See Tulare Lake Basin Plan VI.3. (1995); 2002 Triennial Review of the Water Quality Control Plan for the Tulare Lake Basin pg 3-4.

The Regional Board should conduct the appropriate environmental review for this Draft WDR, as required by CEQA. Please refer to the comments submitted by CRPE for a more thorough discussion of this issue. Ultimately, the only way the public can be sure that this new general WDR program will not result in substantial harm to public health or the environment is through the CEQA process. This process would ensure that cumulative impacts are adequately analyzed and addressed. Cumulative impacts from this Draft WDR are a major concern since it will result in discharges to groundwater from approximately1600 dairy facilities of contaminants, such as nitrate, that are already causing major impacts on valley communities.[19]

B. The Regional Board should ensure that the public has access to all information required as part of this permitting process, including Nutrient Management Plans.

Nutrient Management Plans are only required to be prepared, certified, and kept at the dairy facility, and are only required to be submitted to the Executive Officer upon request.[20] Therefore, in most cases, the Regional Water Board will not review these plans, nor will the public have any access to this information. Given that these Nutrient Management Plans will be the mechanism used to address the major sources of contamination from dairies, namely application of waste to land, it is unreasonable to keep these out of staff and the public's review. While the Executive Officer could conceivably request these reports from individual facilities, such an action is unlikely and there is no reason to not require submittal of this information from all facilities given its importance to the effectiveness of this general permitting program.

V. This Draft WDR does not establish effective mechanisms to ensure enforcement and compliance with clean up of groundwater contamination.

The Draft WDR requires that the dischargers submit a closure plan at least 90 days before ceasing operations, and a closure report 30 days after completion of site closure.[21] However, the Order requires no bonding, insurance, or other financial guarantee that a facility will be able to pay for closure and clean up. Studies show that the greatest risk of groundwater contamination from retention ponds and corrals may occur after a facility is no loner in use.[22] Therefore, it is vital for the Regional Board to ensure that dairy facilities will have adequate resources to clean up closed facilities properly.[23]

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[19] For public well impacts see DHS Annual Compliance Report for Public Drinking Water Systems 2004, available at http://www.dhs.ca.gov/ps/ddwem/publications/AnnualComplianceReport2004.pdf; for private well impacts see the Tulare County Voluntary Domestic Well Assessment Program 2006, available at http://www.waterboards.ca.gov/gama/docs/table_summary_dec06.pdf; See also Waste Discharge Requirements General Order for Existing Milk Cow Dairies Information Sheet, pg 6 (11/22/06)

[20] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, H.2.c. & H.3.d

[21] Waste Discharge Requirements General Order for Existing Milk Cow Dairies, E.11 – 12.

[22] Brown, Vence & Associates, Task 4 Report: Evaluation of Alternative Confined Animal Facilities Criteria to Protect Groundwater Quality From Releases, 2.1.3 (2004), citing Sweeten, J.M. undated. Groundwater Quality Protection for Livestock Feeding Operations. Texas Agricultural Extension Service;

Additionally, this Draft WDR requires no mandatory enforcement action and its reluctance to set strict monitoring requirements and water quality standards makes enforcement extremely difficult and labor intensive for Regional Board staff. It is unclear whether this policy, combined the staffing levels allocated to enforcement of this program, will comply with State Water Board Resolution 92-49.

Conclusion

The Regional Board must act to address the impact of the 1600 existing dairies in the Central Valley. However, it must do so in a way that effectively protects the groundwater that nearly all valley communities rely on as drinking water sources. Thus far this Draft WDR fails to do so in the ways outlined above. We look forward to continuing to work with the Board to ensure that our waters are adequately protected.

Sincerely,

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Laurel Firestone,
Co-Director & Attorney at Law
Community Water Center

Dale Stocking
Mother Lode Chapter Chair
Sierra Club

Deb Self
Executive Director,
Baykeeper

Chang, et al. 1973. Waste Accumulation on a Selected Dairy Corral and Its Effect on the Nitrate and Salt of the Underlying Soil Strata; Journal of Environmental Quality, Volume 2, No. 2, pp. 233-327.

[23] Brown, Vence & Associates, Task 3 Report: Comparison of Regulations Designed to Protect Groundwater Quality From Releases of Confined Animal Facilities, Table 4-1 (2004).